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ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE 7085 Ronald N. Perry 03/16/2001 09/810,762 **EXAMINER** 7590 11/16/2004 NGUYEN, KIMBINH T Patent Department Mitsubishi Electric Research Laboratories, Inc ART UNIT PAPER NUMBER 201 Broadway Cambridge, MA 02139 2671

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	·	Application	No.	Applicant(s)		
Office Action Summary		09/810,762	09/810,762		PERRY ET AL.	
		Examiner		Art Unit		
		Kimbinh T. N		2671		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM						
THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠	Responsive to communication(s) filed on 16 March 2001.					
2a) <u></u>	This action is <b>FINAL</b> . 2b) This action is non-final.					
3)⊠	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)🖂	<ul> <li>4)  Claim(s) 1-9 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) 1-6 and 8 is/are allowed.</li> <li>6)  Claim(s) is/are rejected.</li> <li>7)  Claim(s) 7 and 9 is/are objected to.</li> </ul>					
5)⊠						
6)□						
•						
8) Claim(s) are subject to restriction and/or election requirement.						
Applicat	ion Papers					
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
<b>Priority</b>	under 35 U.S.C. § 119		,			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
A44	,4/c)		•			
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice	ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate	0.152)		
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date <u>03/16/01</u> .	ε) 5 6	Notice of Informal Patent Application (PTO-152)  Other:			

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## **DETAILED ACTION**

1. Claims 1-9 are pending in the application.

2. In the Specification, section "Related Applications" need to be updated the information of U.S. Patent Application Ser. Nos.

## Claim Objections

3. Claim 7 is objected to because they include reference characters "CSG" which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

4. Claim 9 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim (claim 1 depends from claims 1, 2, 5 and 6). See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

## Allowable Subject Matter

5. The following is an examiner's statement of reasons for allowance:

Claim 1, the prior art does not teach generating a first adaptively sampled distance field for the model; constructing a topological hint; generating a second adaptively sampled distance field for the topological hint sampling first locations of the second adaptively sampled distance field to determine a corresponding topological feature for each location; determining second locations in the first

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adaptively sampled distance field from the corresponding topological features of the second adaptively sampled distance field; and sampling the first adaptively sampled distance field at the second locations to determine a distance value for each of the second locations to model the graphics object according to the topological hint.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. This application is in condition for allowance except for the following formal matters: see paragraph 2, 3 and 4.

Prosecution on the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (703) 305-9683. The examiner can normally be reached on Monday to Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached at (703) 305-9798.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 12, 2004

Kimbinh Nguyen

Patent Examiner AU 2671

Kombons Ngreyen